

1

Tyr Leu Thr Ser Pro Gln Gln Ser Gly Gln Trp Gln Gln Pro Gly Gln
 145 150 155 160
 Gly Gln Ala Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Glu
 165 170 175
 Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Trp Gln Pro Glu Gln Leu Gln
 180 185 190
 Gln Pro Thr Gln Gly Gln Gln Arg Gln Gln Pro Gly Gln Gly Gln Gln
 195 200 205
 Leu Arg Gln Gly Gln Gln Gly Gln Gln Ser Gly Gln Gly Gln Pro Arg
 210 215 220
 Tyr Tyr Pro Thr Ser Ser Gln Gln Pro Gly Gln Leu Gln Gln Leu Ala
 225 230 235 240
 Gln Gly Gln Gln Gly Gln Gln Pro Glu Arg Gly Gln Gln Gly Gln Gln
 245 250 255
 Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Gln Gly Gln Gln Pro
 260 265 270
 Gly Gln Lys Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Ile
 275 280 285
 Ser Pro Gln Gln Leu Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln Leu
 290 295 300
 Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Ser Gly
 305 310 315 320
 Tyr Tyr Pro Thr Ser Ala Gln Gln Pro Gly Gln Leu Gln Gln Ser Thr
 325 330 335
 Gln Glu Gln Gln Leu Gly Gln Glu Gln Gln Asp Gln Gln Ser Gly Gln
 340 345 350
 Gly Arg Gln Gly Gln Gln Ser Gly Gln Arg Gln Gln Asp Gln Gln Ser
 355 360 365
 Gly Gln Gly Gln Gln Pro Gly Gln Arg Gln Pro Gly Tyr Tyr Ser Thr
 370 375 380
 Ser Pro Gln Gln Leu Gly Gln Gly Gln Pro Arg Tyr Tyr Pro Thr Ser
 385 390 395 400
 Pro Gln Gln Pro Gly Gln Glu Gln Gln Pro Arg Gln Leu Gln Gln Pro
 405 410 415
 Glu Gln Gly Gln Gln Gly Gln Gln Pro Glu Gln Gly Gln Gln Gly Gln
 420 425 430
 Gln Pro Gly Gln Gly Glu Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln
 435 440 445

Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro
 450 455 460

Gln Gln Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln
 465 470 475 480

Gln Ser Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln
 485 490 495

Glu Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro
 500 505 510

Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr
 515 520 525

Ser Pro Gln Gln Ser Gly Gln Glu Gln Gln Leu Glu Gln Trp Gln Gln
 530 535 540

Ser Gly Gln Gly Gln Pro Gly His Tyr Pro Thr Ser Pro Leu Gln Pro
 545 550 555 560

Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ile Gly
 565 570 575

Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Pro Thr Gln Gly Gln Gln
 580 585 590

Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly
 595 600 605

Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln
 610 615 620

Pro Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly Gln Gly Gln Gln
 625 630 635 640

Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Leu Pro Gly Tyr Tyr Pro
 645 650 655

Thr Ser Ser Leu Gln Pro Glu Gln Gly Gln Gln Gly Tyr Tyr Pro Thr
 660 665 670

Ser Gln Gln Gln Pro Gly Gln Gly Pro Gln Pro Gly Gln Trp Gln Gln
 675 680 685

Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser
 690 695 700

Gly Gln Gly Gln Gln Pro Gly Gln Trp Leu Gln Pro Gly Gln Trp Leu
 705 710 715 720

Gln Ser Gly Tyr Tyr Leu Thr Ser Pro Gln Gln Leu Gly Gln Gly Gln
 725 730 735

Gln Pro Arg Gln Trp Leu Gln Pro Arg Gln Gly Gln Gln Gly Tyr Tyr
 740 745 750

Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly
 755 760 765
 Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln
 770 775 780
 Gln Gly Tyr Asp Ser Pro Tyr His Val Ser Ala Glu His Gln Ala Ala
 785 790 795 800
 Ser Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro Ala
 805 810 815
 Met Cys Arg Leu Glu Gly Gly Asp Ala Leu Leu Ala Ser Gln
 820 825 830

<210> 2
 <211> 815
 <212> PRT
 <213> Wheat

<223> Ax2

<400> 2

Met Thr Lys Arg Leu Val Leu Phe Ala Ala Val Val Val Ala Leu Val
 1 5 10 15
 Ala Leu Thr Ala Ala Glu Gly Glu Ala Ser Gly Gln Leu Gln Cys Glu
 20 25 30
 Arg Glu Leu Gln Glu His Ser Leu Lys Ala Cys Arg Gln Val Val Asp
 35 40 45
 Gln Gln Leu Arg Asp Val Ser Pro Glu Cys Gln Pro Val Gly Gly Gly
 50 55 60
 Pro Val Ala Arg Gln Tyr Glu Gln Gln Val Val Val Pro Pro Lys Gly
 65 70 75 80
 Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Pro Gln Gln Leu Gln Gln
 85 90 95
 Ser Ile Leu Trp Gly Ile Pro Ala Leu Leu Arg Arg Tyr Tyr Leu Ser
 100 105 110
 Val Thr Ser Pro Gln Gln Val Ser Tyr Tyr Pro Gly Gln Ala Ser Ser
 115 120 125
 Gln Arg Pro Gly Gln Gly Gln Gln Glu Tyr Tyr Leu Thr Ser Pro Gln
 130 135 140
 Gln Ser Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Ser Gly Tyr Tyr
 145 150 155 160
 Pro Thr Ser Pro Gln Gln Ser Gly Gln Lys Gln Pro Gly Tyr Tyr Pro

165										170					175				
Thr	Ser	Pro	Trp	Gln	Pro	Glu	Gln	Leu	Gln	Gln	Pro	Thr	Gln	Gly	Gln				
			180					185					190						
Gln	Arg	Gln	Gln	Pro	Gly	Gln	Gly	Gln	Gln	Leu	Arg	Gln	Gly	Gln	Gln				
			195					200					205						
Gly	Gln	Gln	Ser	Gly	Gln	Gly	Gln	Pro	Arg	Tyr	Tyr	Pro	Thr	Ser	Ser				
			210				215					220							
Gln	Gln	Pro	Gly	Gln	Leu	Gln	Gln	Leu	Ala	Gln	Gly	Gln	Gln	Gly	Gln				
			225			230				235						240			
Gln	Pro	Glu	Arg	Gly	Gln	Gln	Gly	Gln	Gln	Ser	Gly	Gln	Gly	Gln	Gln				
				245					250						255				
Leu	Gly	Gln	Gly	Gln	Gln	Gly	Gln	Gln	Pro	Gly	Gln	Lys	Gln	Gln	Ser				
			260					265					270						
Gly	Gln	Gly	Gln	Gln	Gly	Tyr	Tyr	Pro	Ile	Ser	Pro	Gln	Gln	Leu	Gly				
			275				280					285							
Gln	Gly	Gln	Gln	Ser	Gly	Gln	Gly	Gln	Leu	Gly	Tyr	Tyr	Pro	Thr	Ser				
			290				295				300								
Pro	Gln	Gln	Ser	Gly	Gln	Gly	Gln	Ser	Gly	Tyr	Tyr	Pro	Thr	Ser	Ala				
			305			310				315					320				
Gln	Gln	Pro	Gly	Gln	Leu	Gln	Gln	Ser	Thr	Gln	Glu	Gln	Gln	Leu	Gly				
				325					330						335				
Gln	Glu	Gln	Gln	Asp	Gln	Gln	Ser	Gly	Gln	Gly	Arg	Gln	Gly	Gln	Gln				
				340				345					350						
Ser	Gly	Gln	Arg	Gln	Gln	Asp	Gln	Gln	Ser	Gly	Gln	Gly	Gln	Gln	Pro				
			355				360					365							
Gly	Gln	Arg	Gln	Pro	Gly	Tyr	Tyr	Ser	Thr	Ser	Pro	Gln	Gln	Leu	Gly				
			370				375					380							
Gln	Gly	Gln	Pro	Arg	Tyr	Tyr	Pro	Thr	Ser	Pro	Gln	Gln	Pro	Gly	Gln				
			385			390				395					400				
Glu	Gln	Gln	Pro	Arg	Gln	Leu	Gln	Gln	Pro	Glu	Gln	Gly	Gln	Gln	Gly				
				405					410						415				
Gln	Gln	Pro	Glu	Gln	Gly	Gln	Gln	Gly	Gln	Gln	Gln	Arg	Gln	Gly	Glu				
			420					425					430						
Gln	Gly	Gln	Gln	Pro	Gly	Gln	Gly	Gln	Gln	Gly	Gln	Gln	Pro	Gly	Gln				
			435					440					445						
Gly	Gln	Pro	Gly	Tyr	Tyr	Pro	Thr	Ser	Pro	Gln	Gln	Ser	Gly	Gln	Gly				
			450			455						460							

Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Leu Gln
 465 470 475 480
 Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln Glu Gln Gln Gly Gln Gln
 485 490 495
 Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro
 500 505 510
 Thr Ser Pro Gln Gln Ser Gly Gln Glu Gln Gln Leu Glu Gln Trp Gln
 515 520 525
 Gln Ser Gly Gln Gly Gln Pro Gly His Tyr Pro Thr Ser Pro Leu Gln
 530 535 540
 Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ile
 545 550 555 560
 Gly Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Pro Thr Gln Gly Gln
 565 570 575
 Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Glu
 580 585 590
 Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly
 595 600 605
 Gln Pro Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly Gln Gly Gln
 610 615 620
 Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr
 625 630 635 640
 Pro Thr Ser Ser Leu Gln Pro Glu Gln Gly Gln Gln Gly Tyr Tyr Pro
 645 650 655
 Thr Ser Gln Gln Gln Pro Gly Gln Gly Pro Gln Pro Gly Gln Trp Gln
 660 665 670
 Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln
 675 680 685
 Ser Gly Gln Gly Gln Gln Pro Gly Gln Trp Leu Gln Pro Gly Gln Trp
 690 695 700
 Leu Gln Ser Gly Tyr Tyr Leu Thr Ser Pro Gln Gln Leu Gly Gln Gly
 705 710 715 720
 Gln Gln Pro Arg Gln Trp Leu Gln Pro Arg Gln Gly Gln Gln Gly Tyr
 725 730 735
 Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln
 740 745 750
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly
 755 760 765

Gln Gln Gly Tyr Asp Ser Pro Tyr His Val Ser Ala Glu His Gln Ala
 770 775 780

Ala Ser Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro
 785 790 795 800

Ala Met Cys Arg Leu Glu Gly Gly Asp Ala Leu Leu Ala Ser Gln
 805 810 815

<210> 3
 <211> 839
 <212> PRT
 <213> Wheat

<223> Dx5

<400> 3

Met Ala Lys Arg Leu Val Leu Phe Val Ala Val Val Val Ala Leu Val
 1 5 10 15

Ala Leu Thr Val Ala Glu Gly Glu Ala Ser Glu Gln Leu Gln Cys Glu
 20 25 30

Arg Glu Leu Gln Glu Leu Gln Glu Arg Glu Leu Lys Ala Cys Gln Gln
 35 40 45

Val Met Asp Gln Gln Leu Arg Asp Ile Ser Pro Glu Cys His Pro Val
 50 55 60

Val Val Ser Pro Val Ala Gly Gln Tyr Glu Gln Gln Ile Val Val Pro
 65 70 75 80

Pro Lys Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Pro Gln Gln
 85 90 95

Leu Gln Gln Arg Ile Phe Trp Gly Ile Pro Ala Leu Leu Lys Arg Tyr
 100 105 110

Tyr Pro Ser Val Thr Cys Pro Gln Gln Val Ser Tyr Tyr Pro Gly Gln
 115 120 125

Ala Ser Pro Gln Arg Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln
 130 135 140

Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Trp Gln Gln
 145 150 155 160

Pro Glu Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro
 165 170 175

Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln Gly Gln
 180 185 190

Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser
 195 200 205

Ser Gln Leu Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln
 210 215 220
 Gly Gln Gln Pro Gly Gln Ala Gln Gln Gly Gln Gln Pro Gly Gln Gly
 225 230 235 240
 Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln
 245 250 255
 Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Leu Gly Gln Gly Gln Gln
 260 265 270
 Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly Gln Gly Gln Pro Gly
 275 280 285
 Tyr Tyr Pro Thr Ser Leu Gln Gln Leu Gly Gln Gly Gln Ser Gly Tyr
 290 295 300
 Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln
 305 310 315 320
 Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly
 325 330 335
 Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln
 340 345 350
 Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln
 355 360 365
 Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Ser Gln Gln Pro
 370 375 380
 Thr Gln Ser Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Val Gly
 385 390 395 400
 Gln Gly Gln Gln Ala Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln
 405 410 415
 Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly
 420 425 430
 Gln Pro Gly Tyr Tyr Leu Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln
 435 440 445
 Gln Pro Gly Gln Leu Gln Gln Ser Ala Gln Gly Gln Lys Gly Gln Gln
 450 455 460
 Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro
 465 470 475 480
 Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr
 485 490 495
 Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Pro Gly Gln
 500 505 510

Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro
 515 520 525

Leu Gln Pro Gly Gln Gly Gln Pro Gly Tyr Asp Pro Thr Ser Pro Gln
 530 535 540

Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln
 545 550 555 560

Gly Gln Gln Gly Gln Gln Leu Ala Gln Gly Gln Gln Gly Gln Gln Pro
 565 570 575

Ala Gln Val Gln Gln Gly Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln
 580 585 590

Gln Leu Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln
 595 600 605

Gly Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly
 610 615 620

Gln His Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly
 625 630 635 640

Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Trp Tyr Tyr Pro Thr Ser
 645 650 655

Pro Gln Glu Ser Gly Gln Gly Gln Gln Pro Gly Gln Trp Gln Gln Pro
 660 665 670

Gly Gln Gly Gln Pro Gly Tyr Tyr Leu Thr Phe Ser Val Ala Ala Arg
 675 680 685

Thr Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln
 690 695 700

Gly Gln Gln Pro Gly Gln Trp Gln Gln Ser Gly Gln Gly Gln His Trp
 705 710 715 720

Tyr Tyr Pro Thr Ser Pro Lys Leu Ser Gly Gln Gly Gln Arg Pro Gly
 725 730 735

Gln Trp Leu Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 740 745 750

Pro Gln Gln Pro Pro Gln Gly Gln Gln Leu Gly Gln Trp Leu Gln Pro
 755 760 765

Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Thr Gly
 770 775 780

Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Ser Ser Tyr
 785 790 795 800

His Val Ser Val Glu His Gln Ala Ala Ser Leu Lys Val Ala Lys Ala
 805 810 815

Gln Gln Leu Ala Ala Gln Leu Pro Ala Met Cys Arg Leu Glu Gly Gly
820 825 830

Asp Ala Leu Ser Ala Ser Gln
835

<210> 4
<211> 838
<212> PRT
<213> Wheat

<223> HMW2

<400> 4

Met Ala Lys Arg Leu Val Leu Phe Val Ala Val Val Val Ala Leu Val
1 5 10 15

Ala Leu Thr Val Ala Glu Gly Glu Ala Ser Glu Gln Leu Gln Cys Glu
20 25 30

Arg Glu Leu Gln Glu Leu Gln Glu Arg Glu Leu Lys Ala Cys Gln Gln
35 40 45

Val Met Asp Gln Gln Leu Arg Asp Ile Ser Pro Glu Cys His Pro Val
50 55 60

Val Val Ser Pro Val Ala Gly Gln Tyr Glu Gln Gln Ile Val Val Pro
65 70 75 80

Lys Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Pro Gln Gln Leu
85 90 95

Gln Gln Arg Ile Phe Trp Gly Ile Pro Ala Leu Leu Lys Arg Tyr Tyr
100 105 110

Pro Ser Val Thr Ser Pro Gln Gln Val Ser Tyr Tyr Pro Gly Gln Ala
115 120 125

Ser Pro Gln Arg Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln
130 135 140

Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro
145 150 155 160

Gly Gln Trp Gln Gln Pro Glu Gln Gly Gln Pro Gly Tyr Tyr Pro Thr
165 170 175

Ser Pro Gln Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln
180 185 190

Pro Gly Gln Gly Gln Gln Gly Arg Gln Pro Gly Gln Gly Gln Pro Gly
195 200 205

Tyr Tyr Pro Thr Ser Ser Gln Leu Gln Pro Gly Gln Leu Gln Gln Pro
210 215 220
Ala Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln
225 230 235 240
Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln
245 250 255
Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Leu
260 265 270
Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Ser Gly
275 280 285
Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Leu Gly Gln
290 295 300
Gly Gln Ser Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly
305 310 315 320
Gln Gln Pro Gly Gln Leu Gln Gln Pro Ala Gln Gly Gln Gln Pro Glu
325 330 335
Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln
340 345 350
Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro
355 360 365
Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr
370 375 380
Ser Ser Gln Gln Pro Thr Gln Ser Gln Gln Pro Gly Gln Gly Gln Gln
385 390 395 400
Gly Gln Gln Val Gly Gln Gly Gln Gln Ala Gln Gln Pro Gly Gln Gly
405 410 415
Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Leu
420 425 430
Gln Ser Gly Gln Gly Gln Pro Gly Tyr Tyr Leu Thr Ser Pro Gln Gln
435 440 445
Ser Gly Gln Gly Gln Gln Pro Gly Gln Leu Gln Gln Ser Ala Gln Gly
450 455 460
Gln Lys Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln
465 470 475 480
Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln
485 490 495
Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly
500 505 510

Gln Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr
 515 520 525
 Tyr Pro Thr Ser Pro Leu Gln Pro Gly Gln Gly Gln Pro Gly Tyr Asp
 530 535 540
 Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Leu
 545 550 555 560
 Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln Gln Leu Ala Gln Gly Gln
 565 570 575
 Gln Gly Gln Gln Pro Ala Gln Val Gln Gln Gly Gln Gln Pro Ala Gln
 580 585 590
 Gly Gln Gln Gly Gln Gln Leu Gly Gln Gly Gln Gln Gly Gln Gln Pro
 595 600 605
 Gly Gln Gly Gln Gln Pro Ala Gln Gly Gln Gln Gly Gln Gln Pro Gly
 610 615 620
 Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln
 625 630 635 640
 Gly Gln Pro Trp Tyr Tyr Pro Thr Ser Pro Gln Glu Ser Gly Gln Gly
 645 650 655
 Gln Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Trp Gln Gln Pro Gly
 660 665 670
 Gln Gly Gln Pro Gly Tyr Tyr Leu Thr Ser Pro Leu Gln Leu Gly Gln
 675 680 685
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly
 690 695 700
 Gln Gln Pro Gly Gln Trp Gln Gln Ser Gly Gln Gly Gln His Gly Tyr
 705 710 715 720
 Tyr Pro Thr Ser Pro Gln Leu Ser Gly Gln Gly Gln Arg Pro Gly Gln
 725 730 735
 Trp Leu Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro
 740 745 750
 Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Trp Leu Gln Pro Gly
 755 760 765
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Thr Gly Gln
 770 775 780
 Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Ser Ser Tyr His
 785 790 795 800
 Val Ser Val Glu His Gln Ala Ala Ser Leu Lys Val Ala Lys Ala Gln
 805 810 815

Gln Leu Ala Ala Gln Leu Pro Ala Met Cys Arg Leu Glu Gly Gly Asp
820 825 830

Ala Leu Ser Ala Ser Gln
835

<210> 5
<211> 789
<212> PRT
<213> Wheat

<223> Bx7

<400> 5

Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Val Ala Leu Val
1 5 10 15

Ala Leu Thr Ala Ala Glu Gly Glu Ala Ser Gly Gln Leu Gln Cys Glu
20 25 30

His Glu Leu Glu Ala Cys Gln Gln Val Val Asp Gln Gln Leu Arg Asp
35 40 45

Val Ser Pro Gly Cys Arg Pro Ile Thr Val Ser Pro Gly Thr Arg Gln
50 55 60

Tyr Glu Gln Gln Pro Val Val Pro Ser Lys Ala Gly Ser Phe Tyr Pro
65 70 75 80

Ser Glu Thr Thr Pro Ser Gln Gln Leu Gln Gln Met Ile Phe Trp Gly
85 90 95

Ile Pro Ala Leu Leu Arg Arg Tyr Tyr Pro Ser Val Thr Ser Ser Gln
100 105 110

Gln Gly Ser Tyr Tyr Pro Gly Gln Ala Ser Pro Gln Gln Ser Gly Gln
115 120 125

Gly Gln Gln Pro Gly Gln Glu Gln Gln Pro Gly Gln Gly Gln Gln Asp
130 135 140

Gln Gln Pro Gly Gln Arg Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln
145 150 155 160

Gln Pro Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Pro Gly Tyr Tyr
165 170 175

Pro Thr Ser Gln Gln Pro Gly Gln Lys Gln Gln Ala Gly Gln Gly Gln
180 185 190

Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln
195 200 205

Ser Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro
210 215 220

Thr Ser Pro Gln Gln Ser Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln
 225 230 235 240
 Gln Pro Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Gln Gln
 245 250 255
 Pro Gly Gln Gly Gln Arg Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro
 260 265 270
 Ile Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln
 275 280 285
 Pro Gly Tyr Tyr Pro Thr Ser Leu Arg Gln Pro Gly Gln Trp Gln Gln
 290 295 300
 Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Gln Pro
 305 310 315 320
 Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr
 325 330 335
 Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Pro
 340 345 350
 Gly Tyr Tyr Pro Thr Ser Gln Gln Ser Glu Gln Gly Gln Gln Pro Gly
 355 360 365
 Gln Gly Lys Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 370 375 380
 Pro Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Pro Gly
 385 390 395 400
 Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Ser Gly
 405 410 415
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln
 420 425 430
 Gly Gln Gln Pro Gly Gln Gly Gln Ser Gly Tyr Phe Pro Thr Ser Arg
 435 440 445
 Gln Gln Ser Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Ser Gly
 450 455 460
 Gln Gly Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Ala Tyr Tyr
 465 470 475 480
 Pro Thr Ser Ser Gln Gln Ser Arg Gln Arg Gln Gln Ala Gly Gln Trp
 485 490 495
 Gln Arg Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro Gln
 500 505 510
 Gln Pro Gly Gln Glu Gln Gln Ser Gly Gln Ala Gln Gln Ser Gly Gln
 515 520 525

Trp Gln Leu Val Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Leu
 530 535 540
 Gln Gln Pro Ala Gln Gly Gln Gln Pro Ala Gln Gly Gln Gln Ser Ala
 545 550 555 560
 Gln Glu Gln Gln Pro Gly Gln Ala Gln Gln Ser Gly Gln Trp Gln Leu
 565 570 575
 Val Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Leu Gln Gln Pro
 580 585 590
 Ala Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly
 595 600 605
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln
 610 615 620
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly
 625 630 635 640
 Gln Gln Pro Gly Gln Gly Gln Gln Pro Arg Gln Gly Gln Gln Gly Tyr
 645 650 655
 Tyr Pro Ile Ser Pro Gln Gln Ser Gly Gln Gly Gln Gln Pro Gly Gln
 660 665 670
 Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly
 675 680 685
 Gln Gln Pro Gly His Glu Gln Gln Pro Gly Gln Trp Leu Gln Pro Gly
 690 695 700
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Ser Gln Gln Ser Gly Gln
 705 710 715 720
 Gly His Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu
 725 730 735
 Trp Gln Pro Gly Gln Gly Gln Gln Gly Tyr Ala Ser Pro Tyr His Val
 740 745 750
 Ser Ala Glu Tyr Gln Ala Ala Arg Leu Lys Val Ala Lys Ala Gln Gln
 755 760 765
 Leu Ala Ala Gln Leu Pro Ala Met Cys Arg Leu Glu Gly Ser Asp Ala
 770 775 780
 Leu Ser Thr Arg Gln
 785

<210> 6
 <211> 660
 <212> PRT
 <213> Wheat

<223> Dy12

<400> 6

Met	Ala	Lys	Arg	Leu	Val	Leu	Phe	Ala	Ala	Val	Val	Ile	Ala	Leu	Val	
1				5					10					15		
Ala	Leu	Thr	Thr	Ala	Glu	Gly	Glu	Ala	Ser	Arg	Gln	Leu	Gln	Cys	Glu	
			20					25					30			
Arg	Glu	Leu	Gln	Glu	Ser	Ser	Leu	Glu	Ala	Cys	Arg	Gln	Val	Val	Asp	
		35					40					45				
Gln	Gln	Leu	Ala	Gly	Arg	Leu	Pro	Trp	Ser	Thr	Gly	Leu	Gln	Met	Arg	
	50					55					60					
Cys	Cys	Gln	Gln	Leu	Arg	Asp	Val	Ser	Ala	Lys	Cys	Arg	Ser	Val	Ala	
65					70					75					80	
Val	Ser	Gln	Val	Ala	Arg	Gln	Tyr	Glu	Gln	Thr	Val	Val	Pro	Pro	Lys	
				85					90					95		
Gly	Gly	Ser	Phe	Tyr	Pro	Gly	Glu	Thr	Thr	Pro	Leu	Gln	Gln	Leu	Gln	
			100					105					110			
Gln	Gly	Ile	Phe	Trp	Gly	Thr	Ser	Ser	Gln	Thr	Val	Gln	Gly	Tyr	Tyr	
		115					120					125				
Pro	Ser	Val	Thr	Ser	Pro	Arg	Gln	Gly	Ser	Tyr	Tyr	Pro	Gly	Gln	Ala	
		130				135					140					
Ser	Pro	Gln	Gln	Pro	Gly	Gln	Gly	Gln	Gln	Pro	Gly	Lys	Trp	Gln	Glu	
145					150					155					160	
Pro	Gly	Gln	Gly	Gln	Gln	Trp	Tyr	Tyr	Pro	Thr	Ser	Leu	Gln	Gln	Pro	
				165					170					175		
Gly	Gln	Gly	Gln	Gln	Ile	Gly	Lys	Gly	Lys	Gln	Gly	Tyr	Tyr	Pro	Thr	
			180					185					190			
Ser	Leu	Gln	Gln	Pro	Gly	Gln	Gly	Gln	Gln	Ile	Gly	Gln	Gly	Gln	Gln	
		195					200					205				
Gly	Tyr	Tyr	Pro	Thr	Ser	Pro	Gln	His	Thr	Gly	Gln	Arg	Gln	Gln	Pro	
	210					215					220					
Val	Gln	Gly	Gln	Gln	Ile	Gly	Gln	Gly	Gln	Gln	Pro	Glu	Gln	Gly	Gln	
225					230				235						240	
Gln	Pro	Gly	Gln	Trp	Gln	Gln	Gly	Tyr	Tyr	Pro	Thr	Ser	Pro	Gln	Gln	
				245					250					255		
Leu	Gly	Gln	Gly	Gln	Gln	Pro	Gly	Gln	Trp	Gln	Gln	Ser	Gly	Gln	Gly	
			260					265					270			

Gln Gln Gly His Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln
 275 280 285

Gln Gly His Tyr Leu Ala Ser Gln Gln Gln Pro Ala Gln Gly Gln Gln
 290 295 300

Gly His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly
 305 310 315 320

His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly His
 325 330 335

Tyr Pro Ala Ser Gln Gln Glu Pro Gly Gln Gly Gln Gln Gly Gln Ile
 340 345 350

Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln Gly His Tyr Pro
 355 360 365

Ala Ser Leu Gln Gln Pro Gly Gln Gln Gly His Tyr Pro Thr Ser Leu
 370 375 380

Gln Gln Leu Gly Gln Gly Gln Gln Ile Gly Gln Pro Gly Gln Lys Gln
 385 390 395 400

Gln Pro Gly Gln Gly Gln Gln Thr Gly Gln Gly Gln Gln Pro Glu Gln
 405 410 415

Glu Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu
 420 425 430

Gln Gln Pro Gly Gln Gly Gln Gln Gln Gly Gln Gly Gln Gln Gly Tyr
 435 440 445

Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly His Tyr
 450 455 460

Pro Ala Ser Leu Gln Gln Pro Gly Gln Gly Gln Gly Gln Pro Gly Gln
 465 470 475 480

Arg Gln Gln Pro Gly Gln Gly Gln His Pro Glu Gln Gly Gln Gln Pro
 485 490 495

Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly
 500 505 510

Gln Gly Gln Gln Leu Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 515 520 525

Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly
 530 535 540

His Cys Pro Met Ser Pro Gln Gln Thr Gly Gln Ala Gln Gln Leu Gly
 545 550 555 560

Gln Gly Gln Gln Ile Gly Gln Val Gln Gln Pro Gly Gln Gly Gln Gln
 565 570 575

Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Ser
 580 585 590
 Gly Gln Gly Gln Gln Ser Gly Gln Gly His Gln Pro Gly Gln Gly Gln
 595 600 605
 Gln Ser Gly Gln Glu Lys Gln Gly Tyr Asp Ser Pro Tyr His Val Ser
 610 615 620
 Ala Glu Gln Gln Ala Ala Ser Pro Met Val Ala Lys Ala Gln Gln Pro
 625 630 635 640
 Ala Thr Gln Leu Pro Thr Val Cys Arg Met Glu Gly Gly Asp Ala Leu
 645 650 655
 Ser Ala Ser Gln
 660

<210> 7
 <211> 648
 <212> PRT
 <213> Wheat

<223> Dy10

<400> 7

Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Ile Ala Leu Val
 1 5 10 15
 Ala Leu Thr Thr Ala Glu Gly Glu Ala Ser Arg Gln Leu Gln Cys Glu
 20 25 30
 Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Gln Val Val Asp
 35 40 45
 Gln Gln Leu Ala Gly Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg
 50 55 60
 Cys Cys Gln Gln Leu Arg Asp Val Ser Ala Lys Cys Arg Ser Val Ala
 65 70 75 80
 Val Ser Gln Val Ala Arg Gln Tyr Glu Gln Thr Val Val Pro Pro Lys
 85 90 95
 Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Leu Gln Gln Leu Gln
 100 105 110
 Gln Gly Ile Phe Trp Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr
 115 120 125
 Pro Gly Val Thr Ser Pro Arg Gln Gly Ser Tyr Tyr Pro Gly Gln Ala
 130 135 140

Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Lys Trp Gln Glu
 145 150 155 160
 Pro Gly Gln Gly Gln Gln Trp Tyr Tyr Pro Thr Ser Leu Gln Gln Pro
 165 170 175
 Gly Gln Gly Gln Gln Ile Gly Lys Gly Gln Gln Gly Tyr Tyr Pro Thr
 180 185 190
 Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 195 200 205
 Leu Gln His Thr Gly Gln Arg Gln Gln Pro Val Gln Gly Gln Gln Pro
 210 215 220
 Glu Gln Gly Gln Gln Pro Gly Gln Trp Gln Gln Gly Tyr Tyr Pro Thr
 225 230 235 240
 Ser Pro Gln Gln Leu Gly Gln Gly Gln Gln Pro Arg Gln Trp Gln Gln
 245 250 255
 Ser Gly Gln Gly Gln Gln Gly His Tyr Pro Thr Ser Leu Gln Gln Pro
 260 265 270
 Gly Gln Gly Gln Gln Gly His Tyr Leu Ala Ser Gln Gln Gln Pro Gly
 275 280 285
 Gln Gly Gln Gln Gly His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln
 290 295 300
 Gly Gln Gln Gly His Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly
 305 310 315 320
 Gln Gln Gly His Tyr Pro Ala Ser Gln Gln Glu Pro Gly Gln Gly Gln
 325 330 335
 Gln Gly Gln Ile Pro Ala Ser Gln Gln Gln Pro Gly Gln Gly Gln Gln
 340 345 350
 Gly His Tyr Pro Ala Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly
 355 360 365
 His Tyr Pro Thr Ser Leu Gln Gln Leu Gly Gln Gly Gln Gln Thr Gly
 370 375 380
 Gln Pro Gly Gln Lys Gln Gln Pro Gly Gln Gly Gln Gln Thr Gly Gln
 385 390 395 400
 Gly Gln Gln Pro Glu Gln Glu Gln Gln Pro Gly Gln Gly Gln Gln Gly
 405 410 415
 Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gln Gly
 420 425 430
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln
 435 440 445

Gly Gln Gln Gly His Tyr Pro Ala Ser Leu Gln Gln Pro Gly Gln Gly
 450 455 460
 Gln Pro Gly Gln Arg Gln Gln Pro Gly Gln Gly Gln His Pro Glu Gln
 465 470 475 480
 Gly Lys Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro
 485 490 495
 Gln Gln Pro Gly Gln Gly Gln Gln Leu Gly Gln Gly Gln Gln Gly Tyr
 500 505 510
 Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln
 515 520 525
 Gly Gln Gln Gly His Cys Pro Thr Ser Pro Gln Gln Ser Gly Gln Ala
 530 535 540
 Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln Val Gln Gln Pro Gly
 545 550 555 560
 Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Val Gln Gln Pro Gly Gln
 565 570 575
 Gly Gln Gln Ser Gly Gln Gly Gln Gln Ser Gly Gln Gly His Gln Pro
 580 585 590
 Gly Gln Gly Gln Gln Ser Gly Gln Glu Gln Gln Gly Tyr Asp Ser Pro
 595 600 605
 Tyr His Val Ser Ala Glu Gln Gln Ala Ala Ser Pro Met Val Ala Lys
 610 615 620
 Ala Gln Gln Pro Ala Thr Gln Leu Pro Thr Val Cys Arg Met Glu Gly
 625 630 635 640
 Gly Asp Ala Leu Ser Ala Ser Gln
 645

<210> 8
 <211> 705
 <212> PRT
 <213> Wheat

<223> By9

<400> 8

Met Ala Lys Arg Leu Val Leu Phe Ala Thr Val Val Ile Thr Leu Val
 1 5 10 15
 Ala Leu Thr Ala Ala Glu Gly Glu Ala Ser Arg Gln Leu Gln Cys Glu
 20 25 30
 Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Gln Val Val Asp
 35 40 45

Gln Gln Leu Ala Gly Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg
 50 55 60
 Cys Cys Gln Gln Leu Arg Asp Val Ser Ala Lys Cys Arg Pro Val Ala
 65 70 75 80
 Val Ser Gln Val Val Arg Gln Tyr Glu Gln Thr Val Val Pro Pro Lys
 85 90 95
 Gly Gly Ser Phe Tyr Pro Gly Glu Thr Thr Pro Leu Gln Gln Leu Gln
 100 105 110
 Gln Val Ile Phe Trp Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr
 115 120 125
 Pro Ser Val Ser Ser Pro Gln Gln Gly Pro Tyr Tyr Pro Gly Gln Ala
 130 135 140
 Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Lys Trp Gln Glu
 145 150 155 160
 Leu Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu His Gln Ser
 165 170 175
 Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Ser Ser Leu Gln Gln Pro Gly
 180 185 190
 Gln Gly Gln Gln Ile Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 195 200 205
 Leu Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln Gly Gln Gln Gly
 210 215 220
 Tyr Tyr Pro Thr Ser Pro Gln His Pro Gly Gln Arg Gln Gln Pro Gly
 225 230 235 240
 Gln Gly Gln Gln Ile Gly Gln Gly Gln Gln Leu Gly Gln Gly Arg Gln
 245 250 255
 Ile Gly Gln Gly Gln Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro
 260 265 270
 Thr Ser Pro Gln Gln Leu Gly Gln Gly Gln Gln Pro Gly Gln Trp Gln
 275 280 285
 Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Gln
 290 295 300
 Pro Gly Gln Gly Gln Gln Gly Gln Tyr Pro Ala Ser Gln Gln Gln Pro
 305 310 315 320
 Gly Gln Gly Gln Gln Gly Gln Tyr Pro Ala Ser Gln Gln Gln Pro Gly
 325 330 335
 Gln Gly Gln Gln Gly Gln Tyr Pro Ala Ser Gln Gln Gln Pro Gly Gln
 340 345 350

Gly Gln Gln Gly His Tyr Leu Ala Ser Gln Gln Gln Pro Gly Gln Gly
 355 360 365
 Gln Gln Arg His Tyr Pro Ala Ser Leu Gln Gln Pro Gly Gln Gly Gln
 370 375 380
 Gln Gly His Tyr Thr Ala Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln
 385 390 395 400
 Gly His Tyr Pro Ala Ser Leu Gln Gln Val Gly Gln Gly Gln Gln Ile
 405 410 415
 Gly Gln Leu Gly Gln Arg Gln Gln Pro Gly Gln Gly Gln Gln Thr Arg
 420 425 430
 Gln Gly Gln Gln Leu Glu Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln
 435 440 445
 Thr Arg Gln Gly Gln Gln Leu Glu Gln Gly Gln Gln Pro Gly Gln Gly
 450 455 460
 Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gly Gln
 465 470 475 480
 Gln Pro Gly Gln Ser Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr
 485 490 495
 Ser Ser Ser Leu Gln Gln Pro Gly Gln Gly Leu Gln Gly His Tyr Pro
 500 505 510
 Ala Ser Leu Gln Gln Pro Gly Gln Gly His Pro Gly Gln Arg Gln Gln
 515 520 525
 Pro Gly Gln Gly Gln Gln Pro Glu Gln Gly Gln Gln Pro Gly Gln Gly
 530 535 540
 Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Pro Gly Gln Gly Lys
 545 550 555 560
 Gln Leu Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln
 565 570 575
 Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly His Cys Pro
 580 585 590
 Thr Ser Pro Gln Gln Thr Gly Gln Ala Gln Gln Pro Gly Gln Gly Gln
 595 600 605
 Gln Ile Gly Gln Val Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr
 610 615 620
 Pro Ile Ser Leu Gln Gln Ser Gly Gln Gly Gln Gln Ser Gly Gln Gly
 625 630 635 640
 Gln Gln Ser Gly Gln Gly His Gln Leu Gly Gln Gly Gln Gln Ser Gly
 645 650 655

Gln Glu Gln Gln Gly Tyr Asp Asn Pro Tyr His Val Asn Thr Glu Gln
660 665 670

Gln Thr Ala Ser Pro Lys Val Ala Lys Val Gln Gln Pro Ala Thr Gln
675 680 685

Leu Pro Ile Met Cys Arg Met Glu Gly Gly Asp Ala Leu Ser Ala Ser
690 695 700

Gln
705

<210> 9
<211> 602
<212> PRT
<213> Wheat

<223> glulA

<400> 9

Met Ala Lys Arg Leu Val Leu Phe Ala Thr Val Val Ile Gly Leu Val
1 5 10 15

Ser Leu Thr Val Ala Glu Gly Glu Ala Ser Lys Gln Leu Gln Cys Glu
20 25 30

Arg Glu Leu Gln Glu Ser Ser Leu Glu Ala Cys Arg Leu Val Val Asp
35 40 45

Gln Gln Leu Ala Ser Arg Leu Pro Trp Ser Thr Gly Leu Gln Met Arg
50 55 60

Cys Cys Gln Gln Leu Arg Asp Ile Ser Ala Lys Cys Arg Pro Val Ala
65 70 75 80

Leu Ser Gln Val Ala Arg Gln Tyr Gly Gln Thr Ala Val Pro Pro Lys
85 90 95

Gly Gly Pro Phe Tyr His Arg Glu Thr Thr Pro Leu Gln Gln Leu Gln
100 105 110

Gln Gly Ile Phe Gly Gly Thr Ser Ser Gln Thr Val Gln Gly Tyr Tyr
115 120 125

Pro Ser Val Ile Ser Pro Gln Gln Gly Ser Tyr Tyr Pro Gly Gln Ala
130 135 140

Ser Pro Gln Gln Pro Gly Lys Trp Gln Glu Leu Gly Gln Gly Gln Gln
145 150 155 160

Trp Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Gly
165 170 175

Tyr Tyr Arg Thr Ser Leu Gln Gln Pro Gly Gln Arg Gln Gln Gly Tyr
 180 185 190
 Tyr Arg Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln
 195 200 205
 Trp Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln His Pro Gly Gln Gly
 210 215 220
 Gln Gln Pro Gly Gln Val Gln Lys Ile Gly Gln Gly Gln Gln Pro Glu
 225 230 235 240
 Lys Gly Gln Gln Leu Gly Gln Glu Gln Gln Ile Gly Gln Gly Gln Gln
 245 250 255
 Pro Glu Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly
 260 265 270
 Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro Gly Gln Gly Gln
 275 280 285
 Gln Pro Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr
 290 295 300
 Pro Thr Ser Leu Gln Gln Pro Val Gln Gly Gln Gln Gly His Tyr Pro
 305 310 315 320
 Ala Ser Gln His Gln Pro Gly Gln Gly Gln Gln Gly His Gln Pro Ala
 325 330 335
 Ser Leu Gln Leu Ser Gly Gln Gly Gln Gln Gly His His Pro Ala Ser
 340 345 350
 Leu Gln Gln Pro Gly Gln Gly Lys Gln Thr Gly Gln Arg Glu Gln Arg
 355 360 365
 Gln Gln Pro Gly Gln Gly Gln Gln Thr Gly Gln Gly Gln Gln Pro Glu
 370 375 380
 Gln Glu Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Tyr
 385 390 395 400
 Leu Gln Gln Pro Gly Gln Gly Gln Gln Pro Glu Gln Trp Gln Gln Pro
 405 410 415
 Gly Gln Gly Gln Gln Gly His Tyr Pro Ala Ser Leu Gln Gln Ser Gly
 420 425 430
 Gln Gly Gln Gln Gly His Tyr Pro Ala Ser Leu Gln Gln Leu Gly Gln
 435 440 445
 Gly Gln Pro Gly Gln Thr Gln Gln Pro Gly Gln Gly Gln Gln Pro Glu
 450 455 460
 Gln Glu Glu Gln Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 465 470 475 480

Pro Gln Gln Pro Gly Gln Gly Gln Gln Gly His Phe Pro Thr Ser Gly
 485 490 495
 Gln Ala Gln Gln Pro Gly Gln Gly Gln Gln Ile Gly Gln Ala Gln Gln
 500 505 510
 Leu Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Pro
 515 520 525
 Gly Gln Glu Gln Gln Ser Gly Gln Gly Gln Gln Leu Gly Gln Gly His
 530 535 540
 Gln Pro Gly Gln Gly Gln Gln Ser Gly Gln Glu Gln Gln Gly Tyr Asp
 545 550 555 560
 Ser Pro Tyr His Val Ser Val Glu Gln Gln Ala Ala Ser Pro Lys Val
 565 570 575
 Ala Lys Ala His His Pro Val Ala Gln Leu Pro Thr Met Cys Gln Met
 580 585 590
 Glu Gly Gly Asp Ala Leu Ser Ala Ser Gln
 595 600

<210> 10
 <211> 621
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Consensus sequence derived from sequences of Table 1

<400> 10

Met Ala Lys Arg Leu Val Leu Phe Ala Ala Val Val Val Ala Leu Val
 1 5 10 15
 Ala Leu Thr Ala Glu Gly Glu Ala Ser Gln Leu Gln Cys Glu Arg Glu
 20 25 30
 Leu Gln Glu Ser Leu Ala Cys Arg Gln Val Val Asp Gln Gln Leu Arg
 35 40 45
 Asp Val Ser Pro Cys Arg Pro Val Val Ser Pro Val Ala Arg Gln Tyr
 50 55 60
 Glu Gln Gln Val Val Pro Pro Lys Gly Gly Ser Phe Tyr Pro Gly Glu
 65 70 75 80
 Thr Thr Pro Gln Gln Leu Gln Gln Ile Phe Trp Gly Ile Pro Ala Leu
 85 90 95
 Leu Arg Tyr Tyr Pro Ser Val Thr Ser Pro Gln Gln Gly Ser Tyr Tyr
 100 105 110

Pro Gly Gln Ala Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly
 115 120 125
 Gln Gly Gln Gln Gly Tyr Tyr Thr Ser Pro Gln Gln Pro Gly Gln Gln
 130 135 140
 Gln Gly Gln Gly Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln
 145 150 155 160
 Gln Gln Gln Gly Gln Gln Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr
 165 170 175
 Ser Gln Pro Gly Gln Gln Gln Pro Gln Gly Gln Gln Gln Gln Gln Gly
 180 185 190
 Gln Gln Gly Gln Gly Gln Gln Gly Gln Gly Gln Gln Gly Gln Gln Pro
 195 200 205
 Gly Gln Gln Gln Gly Gln Gly Gln Gln Gly Gln Gln Pro Gln Gln Ser
 210 215 220
 Gly Gln Gly Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln Gly
 225 230 235 240
 Gln Gln Gln Gln Gln Gln Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln
 245 250 255
 Gly Gln Gln Pro Gly Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly
 260 265 270
 Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Pro
 275 280 285
 Ser Gln Gln Pro Gly Gln Gln Pro Gln Gln Gly Gln Gln Gln Pro Gln
 290 295 300
 Gly Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr Ser Pro
 305 310 315 320
 Gln Gln Ser Gly Gln Gly Gln Gly Tyr Tyr Thr Ser Pro Gln Gln Ser
 325 330 335
 Gly Gln Gln Gln Pro Gln Gln Gln Gly Gln Gln Gly Gln Gln Pro Gly
 340 345 350
 Gln Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Gln Pro Gly Gln Gly
 355 360 365
 Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly Gln Gln Gln Pro
 370 375 380
 Gly Gln Trp Gln Gln Pro Gly Gln Gly Gln Pro Gly Tyr Tyr Pro Thr
 385 390 395 400
 Ser Pro Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser
 405 410 415

Pro Gln Gln Pro Gly Gln Gly Gln Gln Pro Gln Gln Gln Pro Gln Gly
 420 425 430
 Gln Gln Gln Gln Gln Gln Gln Gln Pro Gln Gly Gln Gln Pro Gly Gln
 435 440 445
 Gly Gln Gln Pro Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro
 450 455 460
 Gln Gln Ser Gly Gln Gly Gln Gln Gly Gln Gly Tyr Tyr Thr Gly Gln
 465 470 475 480
 Gln Gly Tyr Tyr Pro Thr Ser Gln Gln Pro Gly Gln Gly Gln Gln Pro
 485 490 495
 Gly Gln Gln Gln Gln Gly Gln Tyr Tyr Pro Ser Pro Ser Gly Gln Gly
 500 505 510
 Gln Pro Gly Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Gly Gln
 515 520 525
 Gly Gln Gln Pro Gly Gln Gln Gly Gln Trp Leu Gln Pro Gly Gln Gly
 530 535 540
 Gln Gln Gly Tyr Tyr Pro Thr Ser Leu Gln Gln Gly Gln Gly Gln Gln
 545 550 555 560
 Ser Gly Gln Gly Gln Gln Gly Tyr Tyr Pro Gln Gln Ser Gly Gln Gln
 565 570 575
 Gln Gly Tyr Asp Ser Pro Tyr His Val Ser Ala Glu Gln Ala Ala Ser
 580 585 590
 Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro Ala Met
 595 600 605
 Cys Arg Leu Glu Gly Gly Asp Ala Leu Ser Ala Ser Gln
 610 615 620

<210> 11
 <211> 18
 <212> PRT
 <213> wheat

<223> preserved C-terminal motif

<400> 11

Leu Lys Val Ala Lys Ala Gln Gln Leu Ala Ala Gln Leu Pro Ala Met
 1 5 10 15

Cys Arg

<210> 12

<211> 2073
 <212> DNA
 <213> Guinea pig

<220>
 <221> CDS
 <222> (1)..(2073)
 <223> transglutaminase enzyme

<400> 12
 atg gca gag gat ctg atc ctg gag aga tgt gat ttg cag ctg gag gtc 48
 aat ggc cgc gac cac cgc acg gcc gac ctg tgc cgg gag agg ctg gtg 96
 ttg cgg cgg ggc cag ccc ttc tgg ctg acg ctg cac ttt gag ggc cgt 144
 ggc tac gag gct ggt gtg gac act ctc acc ttc aac gct gtg acc ggc 192
 cca gat ccc agt gag gag gcc ggg act atg gcc cgg ttc tca ctg tcc 240
 agt gct gtc gag ggg ggc acc tgg tca gcc tca gca gtg gac cag cag 288
 gac agc act gtc tcg ctg ctg ctc agc acc cca gct gat gcc ccc att 336
 ggc ctg tat cgc ctc agc ctg gag gcc tcc act ggt tac cag ggc tcc 384
 agc ttc gta ctg ggc cac ttc atc ctg ctc tac aat cct cgg tgc cca 432
 gcg gat gct gtc tat atg gac tca gac caa gag cgg cag gag tat gtg 480
 ctc acc caa cag ggc ttc atc tac cag ggc tcg gcc aag ttc atc aat 528
 ggc ata cct tgg aac ttc ggg cag ttt gaa gat ggg atc ctg gat att 576
 tgc ctg atg ctc ttg gac acc aac ccc aag ttc ctg aag aat gct ggc 624
 caa gac tgc tcg cgc cgc agc aga cct gtc tac gtg ggc cgg gtg gtg 672
 agc gcc atg gtc aac tgc aat gac gat cag ggc gtg ctt cag gga cgc 720
 tgg gac aac aac tac agt gat ggt gtc agc ccc atg tcc tgg atc ggc 768
 agc gtg gac atc ctg cgg cgc tgg aaa gac tat ggg tgc cag cgc gtc 816
 aag tac ggc cag tgc tgg gtc ttc gct gct gtg gcc tgc aca gtg ctg 864
 cgg tgc ctt ggc atc ccc acc cga gtc gtg acc aac ttt aac tca gcc 912
 cac gac cag aac agc aac ctg ctc atc gag tac ttc cga aac gag tct 960
 ggg gag atc gag ggg aac aag agc gag atg atc tgg aac ttc cac tgc 1008
 tgg gtg gag tcg tgg atg acc agg ccg gac ctg gag cct ggg tac gag 1056
 ggg tgg cag gcc ctg gac ccc aca ccc cag gag aag agt gaa ggg aca 1104
 tac tgc tgt ggc cca gtt ccg gtt cga gcc atc aag gag ggc cac ctg 1152

aac gtc aag tat gat gca cct ttc gtg ttt gct gag gtc aat gct gac	1200
gtg gtg aac tgg atc cgg cag aaa gat ggg tcc ctg cgc aag tcc atc	1248
aac cat ttg gtt gtg ggg ctg aag atc agt act aag agt gtg ggc cgc	1296
gat gag cga gag gac atc acc cac acc tac aag tac cca gag gga tct	1344
gaa gag gag cgg gaa gct ttt gtt agg gcc aac cac cta aat aaa ctg	1392
gcc aca aag gaa gag gct cag gag gaa acg gga gtg gcc atg cgg atc	1440
cgt gtg ggc cag aac atg act atg ggc agt gac ttt gac atc ttt gcc	1488
tac atc acc aat ggc act gct gag agc cac gaa tgc caa ctc ctg ctc	1536
tgt gca cgc atc gtc agc tac aat gga gtc ctg ggg ccc gtg tgc agc	1584
acc aac gac ctg ctc aac ctg acc ctg gat ccc ttc tgc gag aac agc	1632
atc ccc ctg cac atc ctc tat gag aag tac ggt gac tac ctg act gag	1680
tcc aac ctc atc aag gtg cga ggc ctc ctt atc gag cca gca gcc aac	1728
agc tat gta ttg gcc gag agg gac att tac ctg gag aat cca gaa atc	1776
aag atc cgg gtc ttg ggg gag ccc aag cag aac cgc aag ctg att gct	1824
gag gtg tct ctg aag aat ccg ctc cct gtg ccg ctg ctg ggt tgt atc	1872
ttc acc gtg gaa gga gct ggc ctg acc aag gac cag aag tgc gtg gag	1920
gtc cca gac ccc gtg gaa gca ggg gag caa gcg aag gta cgg gtg gac	1968
ctg ctg ccg acg gag gtg ggc ctc cac aag ctg gtg gtg aac ttc gag	2016
tgc gac aag ctg aag gcc gtg aag ggc tat cgg aac gtc atc atc ggc	2064
ccc gcc taa	2073

<210> 13

<211> 736

<212> DNA

<213> Rice

<220>

<223> regulatory region for seed-specific expression

<400> 13

gaattccttc tacatcggct taggtgtagc aacacgactt tattattatt attattatta	60
---	----

ttattattat tttaaaaaa tataaaatag atcagtcctt caccacaagt agagcaagtt	120
--	-----

ggtgagttat tgtaaagttc tacaaagcta atttaaaagt tattgcatta acttatttca	180
---	-----

tattacaaac aagagtgtca atggaacaat gaaaaccata tgacatacta taattttgtt	240
---	-----

tttattattg aaattatata attcaaagag aataaatcca catagccgta aagttctaca 300
 tgtggtgcat taccaaaata tatatagctt acaaaacatg acaagcttag tttgaaaaat 360
 tgcaatcctt atcacattga cacataaagt gagtgatgag tcataatatt attttctttg 420
 ctacccatca tgtatatatg atagccacaa agttactttg atgatgatat caaagaacat 480
 ttttaggtgc acctaacaga atatccaaat aatatgactc acttagatca taatagagca 540
 tcaagtaaaa ctaacactct aaagcaaccg atgggaaagc atctataaat agacaagcac 600
 aatgaaaatc ctcacatcc ttcaccacaa ttcaaattatt atagttgaag catagtagta 660
 gaatccaaca acaatgaaga tcattttcgt atttgctctc cttgctattg ttgcatgcaa 720
 tgcctctgcg tctaga 736

<210> 14
 <211> 32
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT217 forward primer for amplification of wheat gene Ax1

<400> 14
 gctcagcaga gttctatcac tggctggcca ac 32

<210> 15
 <211> 31
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT219 reverse primer for amplification of wheat gene Ax1

<400> 15
 ggatccgatt acgtggcttt agcagaccgt c 31

<210> 16
 <211> 29
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT228 forward primer for amplification of wheat gene Ax2

<400> 16
 ggatccgctt agaagcattg agtggccgc 29

<210> 17

<211> 31
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT230 reverse primer for amplification of wheat gene Ax2

 <400> 17
 gctcagccta tcactggctg gccacaatg c 31

 <210> 18
 <211> 29
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT185 forward primer for amplification of wheat gene Bx7

 <400> 18
 tctagaatgg cactactcga catggttag 29

 <210> 19
 <211> 21
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT186 reverse primer for amplification of wheat gene Bx7

 <400> 19
 caccatgcaa gctgcagaga g 21

 <210> 20
 <211> 28
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT562 forward primer for amplification of wheat gene Bx17

 <400> 20
 tctagatatg gctaagcggg tagtcctc 28

 <210> 21
 <211> 25
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT563 reverse primer for amplification of wheat gene Bx17

 <400> 21
 gatatctgag agctgcagag agttc 25

<210> 22
 <211> 28
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT272 forward primer for amplification of wheat gene By9

 <400> 22
 cccgggcaca gataaatgtt gtgattca 28

 <210> 23
 <211> 28
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT273 reverse primer for amplification of wheat gene By9

 <400> 23
 gtcgactgca agttgcagag agttctat 28

 <210> 24
 <211> 27
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> G1B5 forward primer for amplification of wheat gene Dx5

 <400> 24
 tgttccatgc aggctacctc ccactac 27

 <210> 25
 <211> 26
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT189 reverse primer for amplification of wheat gene Dx5

 <400> 25
 gtcgacatgc ctaagcacca tgcgag 26

 <210> 26
 <211> 30
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> G2B3 forward primer for amplification of wheat gene Dy10

<400> 26
 aagcttttca ttttgcattha ttattgggtt 30

<210> 27
 <211> 27
 <212> DNA
 <213> Artificial sequence

<220>
 <223> G2B5 reverse primer for amplification of wheat gene Dyl0

<400> 27
 accttatcca tgcaagctac cttccac 27

<210> 28
 <211> 32
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT482 forward primer for amplification of wheat gene Dyl2

<400> 28
 gaattcgcag atttgcaaaa gcaatggcta ac 32

<210> 29
 <211> 34
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT483 reverse primer for amplification of wheat gene Dyl2

<400> 29
 tctagagctt gtgagaaagg ggtaatcatc agtg 34

<210> 30
 <211> 31
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT488 forward primer for amplification of wheat gene HMW2

<400> 30
 gaattcagct ttgagtggcc gtagatttgc a 31

<210> 31
 <211> 33
 <212> DNA
 <213> Artificial sequence

<220>
 <223> PLT489 reverse primer for amplification of wheat gene HMW2

 <400> 31
 ggatccatat aggatctgtc gcattcatgg ctg 33

 <210> 32
 <211> 26
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT571 forward primer for amplification of wheat gene Glula

 <400> 32
 tctagatggc taagcggttg gtcttc 26

 <210> 33
 <211> 33
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT572 reverse primer for amplification of wheat gene Glula

 <400> 33
 gatatcgctc cttgttgcac tcaacactct tac 33

 <210> 34
 <211> 30
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT237 forward primer for amplification of guinea pig gene
 transglutaminase

 <400> 34
 tctagaatgg cagaggatct gatcctggag 30

 <210> 35
 <211> 28
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> PLT238 reverse primer for amplification of guinea pig gene
 transglutaminase

 <400> 35
 gagctcttag gcggggccga tgatgacg 28

<210> 36
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> Gln in position 6 is the amino acid to be mutated

<400> 36

Pro Phe Pro Gln Pro Gln Leu Pro Tyr
1 5

<210> 37
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> Gln in position 4 is the amino acid to be mutated

<400> 37

Pro Gln Pro Gln Leu Pro Tyr Pro Gln
1 5

<210> 38
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<223> Gln in position 6 is the amino acid to be mutated

<400> 38

Pro Tyr Pro Gln Pro Gln Leu Pro Tyr
1 5

<210> 39
<211> 13
<212> PRT
<213> Artificial sequence

<220>
<223> Gln in position 10 is the the amino acid to be mutated

<400> 39

Leu Gln Leu Gln Pro Phe Pro Gln Pro Gln Leu Pro Tyr
1 5 10

<210> 40
 <211> 13
 <212> PRT
 <213> Artificial sequence

 <220>
 <223> Tyr in position 5 and Ser in position 8 are the amino acids to
 be mutated

<400> 40

Gln Gln Gly Tyr Tyr Pro Thr Ser Pro Gln Gln Ser Gly
 1 5 10

<210> 41
 <211> 8
 <212> PRT
 <213> Artificial sequence

<220>
 <223> as for Seq ID NO:40

<400> 41

Gln Gln Gly Tyr Tyr Pro Thr Ser
 1 5

<210> 42
 <211> 8
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Gln in positions 4,5 and 7 are the amino acids to be mutated

<400> 42

Pro Phe Ser Gln Gln Gln Gln
 1 5

<210> 43
 <211> 12
 <212> PRT
 <213> Artificial sequence

<220>
 <223> Gln in positions 4 and 6 are the amino acids to be mutated

<400> 43

Gln Ser Glu Gln Ser Gln Gln Pro Phe Gln Pro Gln
 1 5 10

<210> 44
<211> 9
<212> PRT
<213> Artificial sequence

<220>
<221> misc_feature
<222> 2
<223> Xaa is any residue

<220>
<223> Gln in position 4 is the amino acid to be mutated

<400> .44

Gln Xaa Pro Gln Gln Pro Gln Gln Phe
1 5